

may be the bond of your connubial happiness is our most sincere wish, and also that Divine Providence may long, very long, preserve Your Royal Highness's life, in possession of every blessing, both as a husband and as a father."

The Society then adjourned over the Christmas recess, to meet again on the 7th of January next.

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January 7, 1841.

Sir JOHN W. LUBBOCK, Bart., V.P. and Treas., in the Chair.

Julius Jeffreys, Esq., was balloted for and duly elected into the Society.

The following communication was read, viz.—

"Variation of the Magnetic Declination, Horizontal Intensity, and Inclination observed at Milan on the 23rd and 24th December 1840." Communicated by Professor Carlini, Director of the Milan Observatory.

A paper was also read, entitled, "On the Chorda dorsalis." By Martin Barry, M.D., F.R.S.S. L. & E.

The author of this communication, after pointing out the similarity in appearance between an object noticed by him in the mammiferous ovum, and the incipient chorda dorsalis described by preceding observers in the ova of other Vertebrata, mentions some essential differences between his own observations and those of others as to the nature and mode of origin of these objects, and their relation to surrounding parts. Von Baer, the discoverer of the chorda dorsalis, describes this structure as "the axis around which the first parts of the fœtus form." Reichert supposes it to be that embryonic structure which serves as "a support and stay" for parts developed in two halves. The author's observations induce him to believe that, instead of being "the axis *around which* the first parts of the fœtus form," the incipient chorda is the last-formed row of cells, which have pushed previously-formed cells farther out, and that, instead of being merely "a support and stay" for parts developed in two halves, the incipient chorda occupies the centre out of which the "two halves" originally proceeded as a single structure, and is itself in the course of being enlarged by the continued origin of fresh substance in its most internal part.

The author enters into a minute comparison of the objects in question; from which it appears that the incipient chorda is not, as Baer supposed, developed into a globular form at the fore end, but that the linear part is a process from the globular; and that the pellucid cavity contained within the latter—a part of prime importance, being the main centre for the origin of new substance—is not mentioned

by Von Baer. Farther, that the origin of the "laminæ dorsales" of this naturalist (the "central nervous system" of Reichert) is not simultaneous with, but anterior to, that of the chorda.

The author then reviews the observations of Rathke and Reichert on the chorda dorsalis, which contain internal evidence, he thinks, of a process in the development of Fishes, Reptiles, and Birds, the same as that which he has observed in Mammalia; namely, the origin of the embryo out of the nucleus of a cell.

And it is his opinion that this observation may assist to solve a question on which physiologists are not agreed; for it shows, that if the nucleus of a cell is a single object, the first rudiments of the embryo are not two halves. The author thinks that unless the very earliest periods are investigated, it is in vain that we attempt to learn what that is, of which the rudiments of the embryo are composed. From not attending to this, physiologists have supposed their "primitive trace" to arise in the substance of a membrane, which the author, in his second series on the embryo, showed could not be the case. To the same cause he thinks is referable an opinion recently advanced by Reichert, that the first traces of the new being are derived from cells of the yolk.

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January 14, 1841.

Sir JOHN W. LUBBOCK, Bart., V.P. and Treas., in the Chair.†

Charles Enderby, Esq. and James Cosmo Melvill, Esq. were balloted for and duly elected into the Society.

A paper was read, entitled, "On the Corpuscles of the Blood." Part II. By Martin Barry, M.D., F.R.S.S. L. and E.

The observations recorded in this memoir are founded on an examination of the blood in every class of vertebrated animals, in some of the Invertebrata, and in the embryo of Mammalia and Birds. The nucleus of the blood-corpuscle, usually considered as a single object, is here represented as composed, in some instances, of two, three, or even many parts; these parts having a constant and determinate form. In the substance surrounding the nucleus, the author has frequently been able to discern, not merely "red colouring matter," but cell-like objects; and he points out an orifice as existing at certain periods in the delicate membrane by which this substance is surrounded. In a former memoir he had differed no less from previous observers regarding "cells." He had shown, for instance, that the nucleus of the cell, instead of being "cast off as useless, and absorbed," is a centre for the origin, not only of the transitory contents of its own cell, but also of the two or three principal and last-formed cells, destined to succeed that cell; and that a separation of the nucleus into two or three parts, is not, as Dr. Henle had supposed in the case of the Pus and Mucus-globule (the only instances